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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,487	07/13/2004	Mitsuaki Oshima	AOY-3983US	9517
23122	7590	03/05/2007		
RATNERPRESTIA			EXAMINER	
P O BOX 980			TURK, NEIL N	
VALLEY FORGE, PA 19482-0980				
			ART UNIT	PAPER NUMBER
			1743	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/501,487

Applicant(s)

OSHIMA, MITSUAKI

Examiner

Neil Turk

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No: _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Remarks

This Office Action fully acknowledges Applicant's remarks made on November 30th, 2006. Claims 1, 2, 4, and 6 are pending. Claims 3, 5, and 7-18 have been cancelled.

Election/Restrictions

Applicant's election without traverse of group I, claim 1-6 and 13 in the reply filed on November 30th, 2006 is acknowledged.

Claim Interpretation

As amended claim 1 currently reads the regions recited are not structurally defined. The first region is not defined in length or position, and the second region is not defined in length and the position is only such that it is at a start section or an end section; the claimed regions also allow for an overlapping relationship between the two regions. As such, the Examiner asserts that the prior art may read on such requirements in the regions by defining the regions in any number of ways allowed by the broad length and position limitations currently established.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kambara (6,288,220, corresponding to JP 11-243997).

Kambara discloses a DNA probe array. Kambara discloses a probe array, which comprises an array of a plurality of particles (such as beads) having probes respectively fixed thereon and the probes are capable of binding to different target substances such as DNA and proteins (lines 40-45, col. 3). Kambara also discloses that the beads holding the probes are labeled with different dyes or fluorophores, respectively, depending on the kinds of probes held by the beads (lines 58-60, col. 3). Kambara also discloses that the particles are arrayed in a predetermined order (lines 65-67). Kambara further discloses that the size and shape of the particles holding the probes corresponds to the kind of probes fixed on the surface of the particles, and that also the particles are labeled with different dyes or fluorophores depending on the kind of probes held by the particles (lines 18-34, col. 4). Kambara also discloses that the small spherical particles (beads) having probes are arrayed in a plurality of transparent capillaries and marker particles are placed between the small spherical particles having different species of probes (lines 22-27, col. 17; lines 1-7, col. 18). Kambara further discloses that the marker particles are placed between the small particles having

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different kinds of probes and the marker particles are labeled with fluorophores different from the fluorophores labeling the small particles (equivalent to the marker particles being optically distinguishable from the beads) (lines 36-40, col. 6). Examiner asserts that given the current structural limitations to the regions as recited in claim 1, figure 7 of Kambara can be made into two regions so as to meet the requirements recited in amended claim 1. Kambara also discloses that the positions of the marker particles on the probe array are reference positions for discriminating the species of the probes on the small particles and inserting a marker between the small particles make it easy to know the arraying order of the probes (lines 40-45, col. 6; lines 5-10, col. 10) (equivalent to arranging the mark beads corresponding to an identification code indicating identification data and number).

Response to Arguments

Applicant's arguments filed November 30th, 2006 have been fully considered but they are not persuasive. As discussed above, Applicant has not defined the first and second regions in their respective length and position and as such the disclosure of Kambara can be interpreted to define two such regions as defined in amended claim 1. Further as discussed above the marker beads of Kambara help to more easily define the arraying order and pattern of the different kinds of probes within the probe array.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil Turk whose telephone number is 571-272-8914. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NT


Jill Warden
Supervisory Patent Examiner
Technology Center 1700